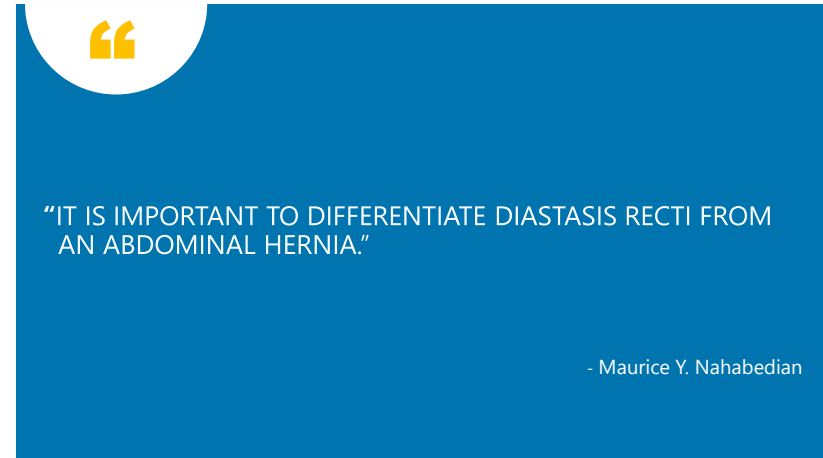
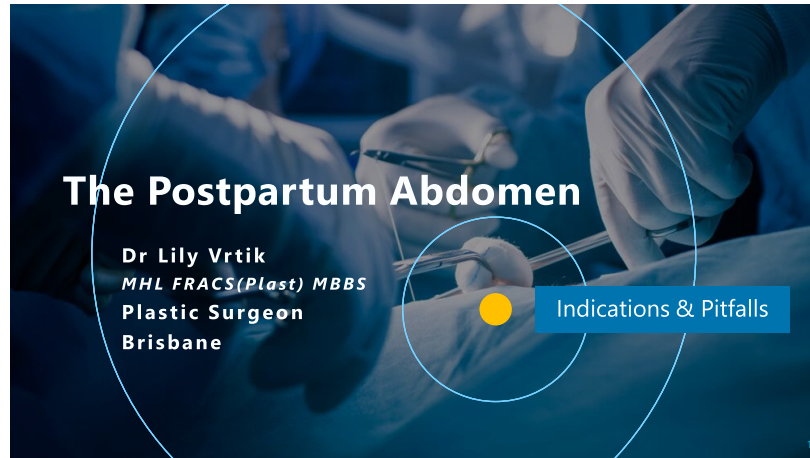
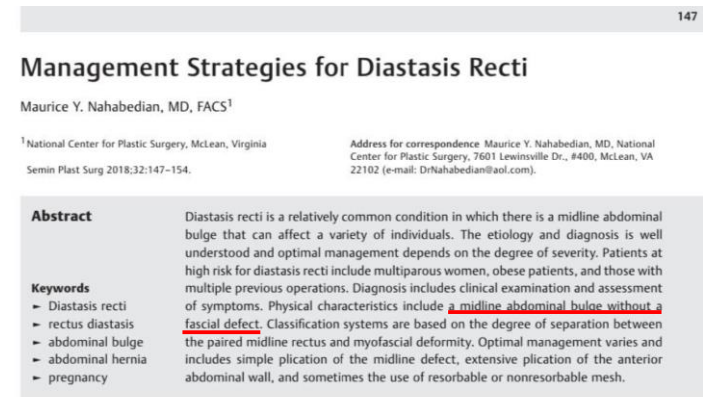




The Postpartum Abdomen

- 1**
Overview
Pathophysiology
- 2**
Techniques:
The Musculature
The skin
- 3**
Postoperative
Care
&
Common
Complications
- 4**
The Evidence
The Benefits
- 5**
Before
&
Afters

3



Diastasis recti is a common contour deformity affecting women from 600 to 1,300 cm between the umbilicus and the

1. Pathophysiology of the Postpartum Abdomen

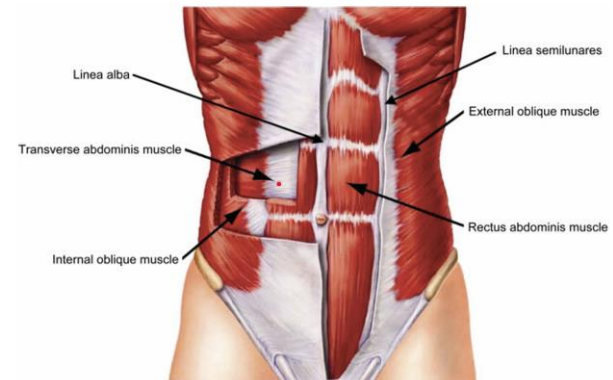
Anatomical Pathology

Myofascial Laxity

Attenuation of Linea Alba

Separation of recti muscles

Lengthening & thinning of recti



5

6

Classification

Table 1 The Nahas classification based on the myofascial deformity

Nahas classification		
Deformity	Etiology	Correction
Type A	Pregnancy	Anterior sheath plication
Type B	Myoaponeurotic laxity	External oblique plication
Type C	Congenital	Rectus abdominis advancement
Type D	Obesity	Anterior sheath plication and rectus abdominis advancement

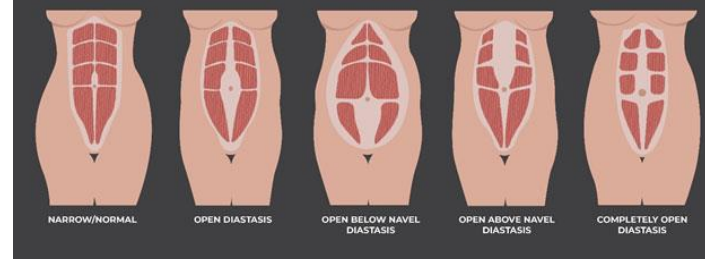
Table 2 The Rath classification based on the level of the attenuation relative to the umbilicus and the patient age

Rath classification		
Level	Age < 45	Age > 45
Above umbilicus	10 mm	15 mm
At umbilicus	27 mm	27 mm
Below umbilicus	9 mm	14 mm

Table 3 The Beer classification based on the normal width of the linea alba

Beer classification	
Normal width of the linea alba (mm)	
Level	Width
At Xiphoid	15
3 cm above umbilicus	22
2 cm below umbilicus	16

VARIATIONS OF DIASTASIS RECTI



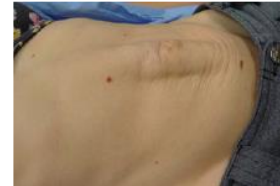
8

1.

Pathophysiology of the Postpartum Abdomen

Anatomical Pathology	Risk Factors	Clinical Features
Myofascial Laxity	Multiparous	Decreased recti tone
Attenuation of Linea Alba	Increased BMI	Abdominal bulge
Separation of recti	Previous abdominal surgery	(on straining, standing and leaning)
Lengthening & thinning of recti		

9



10

Diagnosis

History, Examination, Imaging

Item Descriptor

30175	Radical abdominoplasty, with repair of rectus diastasis, excision of skin and subcutaneous tissue, and transposition of umbilicus, not being a laparoscopic procedure, where the patient has an abdominal wall defect as a consequence of pregnancy, if: (a) the patient: (i) has a diastasis of <u>at least 3cm measured by diagnostic imaging</u> prior to this service; and
-------	--

2. Techniques

Plication

- Inter-recti (2 layer)
 - Lateral anterior sheath plication
- Suture types: Abs vs Non-Abs
Barbed vs non-barbed

Part 1. Musculature/Fascia



2. Techniques

Part 1. Musculature/Fascia

Plication

1. Inter-recti (2 layer)
2. Lateral anterior sheath plication

Plication with Onlay Mesh

Plication of rectus +
Absorb or Non-Absorb Mesh overlying anterior
abdominal wall – sutured in place.



2. Techniques

Part 1. Musculature/Fascia

Plication

1. Inter-recti (2 layer) Abs vs Non-Abs
2. Lateral anterior sheath plication
3. Barbed vs non-barbed

Plication with Onlay Mesh

Plication of rectus +
Absorb or Non-Absorb Mesh overlying anterior
abdominal wall – sutured in place.

Plication with Retrorectus Mesh

Posterior rectus sheath
Retrorectus mesh
Rectus plication & anterior sheath repair



2.

Techniques: Outcome Comparison

Plication Only

1 layer vs 2 layers
Absorb vs non-absorb

Plication & Onlay Mesh

No Evidence

Plication & Retrorectus Mesh

Comparison to plication only

15

2. Techniques

Part II. The Skin

Axis of Laxity

1. Vertical laxity (Fleur-de-lis)
2. Horizontal laxity (position of pubis)
3. No Laxity

Scars

Old Scars:
Skin Ischaemia
Adhesions & incisional hernias
New Scar Placement

Umblicoplasty

Periumbilical scars
Umbilical hernia



3. Postop Recovery & Complications

Early

Bleed/Haematoma
Wound
Seroma
Infection (Mesh)
DVT/PE
Umbilicus Necrosis

Delayed

Scar issues
(placement, dog ears,
tethering, pain,
hypertrophy/keloid)
Chronic Pain
Umbilicus Cosmesis
Diastasis Recurrence

17

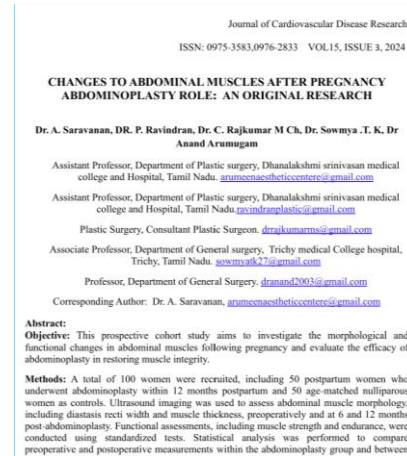
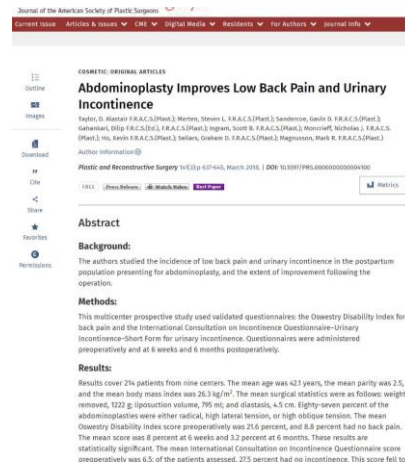
Functional Benefit

Sample size:

214 multicentre prospective

Results:

1. Improvement in back pain
2. Improvement in urinary continence
3. No difference in 'types' of abdominoplasty



18

3. Functional Benefit

Sample Size:

100 (50 postpartum: 50 nulliparous)

Results:

1. Reduction in diastasis
2. Improved muscle thickness
3. Improve muscle strength
4. No change in nulliparous group



New MBS item 30175 for abdominoplasty

Last updated: 29 March 2022

- From 1 July 2022, a new Medicare Benefits Schedule (MBS) item will be created for radical abdominoplasty with repair of rectus diastasis (separation of the large abdominal muscles) where the patient has an abdominal wall defect because of pregnancy.
- This change is relevant for plastic and reconstructive surgeons and general surgeons.
- This new item will benefit a small subset of patients who have a diastasis of at least 3cm measured by diagnostic imaging prior to this service.

What are the changes?

From 1 July 2022, there will be a new MBS item (30175) for radical abdominoplasty with repair of rectus diastasis (separation of the large abdominal muscles) following pregnancy. The new item descriptor is on page 2 of this factsheet.

Item Descriptor

30175	Radical abdominoplasty, with repair of rectus diastasis, excision of skin and subcutaneous tissue, and transposition of umbilicus, not being a laparoscopic procedure, where the patient has an abdominal wall defect as a consequence of pregnancy, if: (a) the patient: - has a diastasis of at least 3cm measured by diagnostic imaging prior to this service; and - has symptoms of at least moderate severity of pain or discomfort at the site of the diastasis in the abdominal wall during functional use and/or low back pain or urinary symptoms likely due to rectus diastasis that have been documented in the patient's records by the practitioner providing this service; and - has failed to respond to non-surgical conservative treatment including physiotherapy; and - has not been pregnant in the last 12 months (b) the service is not a service associated with a service to which item 30165, 30651, 30655, 30168, 30171, 30172, 30176, 30177, 30179, 45530, 45564 or 45565 applies Applicable once per lifetime (H) (Anaes.) (Assist.) Fee: \$1025.60 Benefit: 75% = \$769.20
-------	--

21



Contraindications

- BMI >30
- Intra-abdominal vs subcutaneous fat
- Unstable weight
- Smoker/Vaping
- Poor compliance
- Future pregnancies (contraception)
- Previous abdominal surgery
- DVT/PE History
- Breast cancer reconstruction

22



Weight Changes

- Weight Gain
- Weight Loss
- Weight Fluctuation
- Pregnancy

23



Yasiru Gehan Karunaratne, Pascallino Bruno Romero, Meg Willis & Amira Sanki

666 Accesses 2 Citations Explore all metrics →

Abstract

Background

As advanced maternal age and hariatric procedures have become more common, the number of women seeking pregnancy after having abdominoplasty has increased. This has traditionally been a relative contraindication and counselled against, though there are little data in the literature regarding the potential effects to mother and baby.

Methods

A systematic review of Medline and Embase databases was performed to identify cases of pregnancy occurring after abdominoplasty. Data were extracted and analysed for presentation.

Results

Pregnancy after Abdominoplasty

Sample Size:

Meta-analysis

17 studies 237 patients

Results:

Pregnancy is not contraindicated

No mortality

43:57 (CS:VD)

24

Combination Procedure

Sample Size:
37

Results:
Safe

Diastasis outcome equal
Superiority in body-image
perception and overall
satisfaction



Questions

